## On the Rumoured Presence of the Large Blue Butterfly (Maculinea arion L.) in the Hebrides

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In his article in the October 1973 number of the Record titled "They were Irish Gannets", Mr. H. C. Huggins refers to a rumour of the presence of the Large Blue in West Cork in 1962, which he and Mr. E. S. A. Baynes laid in 1963. To this the Editor of the *Record* added a footnote mentioning the reference by the late Professor J. W. Heslop Harrison to "the presence on Rhum of such species as the Large Blue (*Maculinea arion*)" in an article on "The Passing of the Ice Age" contributed to *The New Naturalist: A Journal of British Natural History*, published by Collins in 1948 (p. 89), and adding the comment "However, we have never had confirmation of this record".

Made in a surprisingly casual way, this record, which I am pretty sure is the inspiration behind later unconfirmed reports of the existence of *M. arion* in the Hebrides, has never been confirmed, in spite of many efforts of Mr. Peter Wormell, a competent and keen entomologist, who was Warden of the Island of Rum from the time that it was acquired by the Nature Conservancy in 1957, until 1974, or by any other entomologists who have visited the island. But behind the record lies an

interesting and rather puzzling story.

Having started to make entomological observations in the Hebrides in 1934<sup>1</sup>, first on Barra<sup>2</sup>, and after May 1938 on Canna<sup>3</sup>, where I farm, I was particularly interested in this rumour of the presence of *M. arion* on Rum, which I first heard in the autumn of 1945. Surviving correspondence to which I have had access through the courtesy of Mr. N. D. Riley shows that in fact the rumour of the alleged existence of *M. arion* on the island of Rum goes back to July 1938. On the 28th of that month Professor Heslop Harrison wrote to H. M. Eldesten from Rum a short letter on lepidoptera observed on the island during his expedition there that year, and ending with the postscript "The most extraordinary thing here is *Lyc. arion*. We have seen two but did not catch them".

Subsequently Professor Heslop Harrison sent to N. D. Riley for publication in the *Entomologist* an article on his Hebridean expedition of 1938, presumably that published on p. 265 of Vol. LXXI in December of that year, and headed with a long title beginning "The Rhopalocera of the Islands of Rhum, Eigg, Eilean nan Each and Heisker". As originally submitted, this article contained a reference to the supposed

<sup>2</sup> Scottish Naturalist, Nov.-Dec. 1938, "The Macro-lepidoptera of the Parish of Barra".

<sup>&</sup>lt;sup>1</sup> Entomologist, Vol. LXVII, p. 279, "Dicranura vinula in Outer Hebrides".

<sup>&</sup>lt;sup>3</sup> Entomoligist, March 1946, "Catalogue of a Collection of Macrolepidoptera made in the Hebrides between 1936 and the present date". Etc.

observation of *M. arion* on Rum; but N. D. Riley raising the objection that "if the species really does occur there, there will almost certainly be a stampede of collectors to try and get it, and . . . if it does not occur there then your reputation will not have been greatly enhanced in the eyes of the same collectors".<sup>4</sup> Professor Heslop Harrison agreed that the reference to *M. arion* should be omitted from the article.<sup>5</sup> Subsequently Professor Heslop Harrison asserted that he had only meant to record "the *possible* occurrence of *M. arion* on Rhum". "Attention was merely drawn to the possibility and to the observation of two people so that some future worker could verify or disprove our notions."

It must be said that it is difficult to see the scientific value of a report of the *possible* occurrence of any butterfly on any particular island.

In the autumn of 1945 I was in Oxford, where I spent the winter of 1945-46 following a breakdown in health. There I went to call on David Parsons who was doing a post-war course at Magdalen College, and who had visited Canna with Gavin Maxwell in the summer of 1944. Parsons showed me a specimen of the Large Blue which, he said, had been caught on Rum and given to him by Professor Heslop Harrison. I expressed some scepticism; the specimen looked old and dry and had no data label. The possibility that the Large Blue really occurred in the Hebrides seemed an extremely remote one to me.

Next came the reference to *M. arion* on Rum in Professor Heslop Harrison's article on "The Passing of the Ice Age" in the *New Naturalist*, published in 1948, already referred to. The odd thing is that the Editor of the *Record* possesses a letter from Professor Heslop Harrison written on 27th September of the same year, saying "It is correct that *M. arion* has occurred in the Hebrides, in the Isle of Rhum, three specimens only being involved. As I have no wish to record the fact until I have seen the insect in greater quantity, nothing has been, or will be, published until I know more facts". He must have forgotten the allusion he had made in the article contributed to the *New Naturalist*.

In 1955 Professor Heslop Harrison published his article on "The Lepidoptera of the Lesser Skye Isles" (including Rum and Canna) in the May and June issues of the *Record*. There is no reference to the capture of *M. arion* on Rum in this article. In 1969 an important paper on "The Entomology of the Isle of Rhum National Nature Reserve", edited by W. O. Steel and G. E. Woodroffe, was published in the March issue of the *Transactions of the Society for British Entomology* (Vol. 18, part 6). *M. arion* is not included amongst the Rum lepidoptera.

In these circumstances, and seeing that there had never been confirmation of the presence of *M. arion* on the island of Rum,

<sup>&</sup>lt;sup>4</sup> N. D. Riley to Professor Heslop Harrison, 20/10/38.

<sup>&</sup>lt;sup>5</sup> Professor Heslop Harrison to N. D. Riley, 21/10/38.

<sup>&</sup>lt;sup>6</sup> Professor Heslop Harrison to N. D. Riley, 25/4/39.

while rumours of its presence on other islands of the Hebrides were beginning to circulate, it seemed to be time for a further investigation of its alleged capture on Rum (rumours from other islands being only of sightings).

The first step was to trace David Parsons. This was eventually done, and he was found to be living at Broxbourne in Hertfordshire. He very kindly went to some trouble to search in his papers for letters relating to the subject of the Rum *arion*. A considerable correspondence then developed between myself and Parsons, Peter Wormell, E. C. Pelham-Clinton, N. D. Riley, and others, on the subject. The outcome was some very interesting information, but not an entire solution of the puzzle.

Professor Heslop Harrison had told Parsons that he had taken three specimens of *M. arion* on Rum in the summer of 1943; one had been given to Mr. W. Campion, who had been there at the time; another was later given to Parsons, as has already been related; and Professor Harrison had told Parsons that he would send the third specimen to Oxford, but Oxford knows nothing of any such specimen. Another person who had witnessed the capture was Miss Rhodes, who had been doing some form of natural history research on Rum at the time. Parsons himself remembered Miss Rhodes being on Rum in the summer of 1944, when he visited the island; but although the conditions were ideal, there was no sign of *arion*.

Parsons added that while on leave at Oxford before the summer of 1944, he had been advised by James Fisher to look for *M. arion* on Rum, the localities suggested being Glen Shellesder, Samhnan Insir, Mullach Mor, and Allt Mor na h-Uamha. These are fairly widely separated places in the west, north and east of the island respectively. There seems to be some confusion here, however. In his letter of 2/9/69 Parsons wrote to me that he was "fairly sure that Glen Shellesder was the one which Heslop Harrison seemed to favour. We landed at Harris Bay — and the glen ran at right angles to the shore — and there was plenty of ant's nests and thyme". I had heard myself that Harris Bay was supposed to be the locality for *M. arion* on Rum, but Glen Shellesder is not there, but in the part of the island opposite to Canna. It is hardly a suitable locality for *arion*.

This described the circumstances of the alleged captures; the important thing now was to trace the witnesses and the specimens. Here the results were as follows:—

David Parsons was under the impression that he had given the specimen of *M. arion* that Heslop Harrison had given him, to E. B. Ford at Oxford. But E. B. Ford stated to E. C. Pelham-Clinton later that he had never possessed or seen the specimen. He had heard of it long ago but had doubted its existence. 10

<sup>&</sup>lt;sup>7</sup> Letter from Professor Heslop Harrison to David Parsons of 4/1/45.

<sup>&</sup>lt;sup>8</sup> Letters from David Parsons to J.L.C. of 2/9/69 and 20/9/70.

<sup>&</sup>lt;sup>9</sup> Parsons to J.L.C., 2/9/69.

<sup>&</sup>lt;sup>10</sup> Pelham-Clinton to Parsons, 5/10/70.

(In fact in his book on Butterflies, published in 1945, he had said he had omitted from the map localities claimed for Wiltshire and Hertfordshire, as well as "the possibility of another,

and very different, habitat for this species" (p. 127).

W. Campion to whom Heslop Harrison was said to have given one of the specimens from Rum, and to have been present at the time of capture, was a collector who lived near Newcastle. He had died about twenty years ago, and no one knew what had become of his collection.11

Miss Rhodes was eventually traced through the help of Colonel Mackworth Praed and N. D. Riley, and was found to be at Hildersham Hall, Cambridge. Peter Wormell got into touch with her, and was told that she was with Professor Heslop Harrison when the supposed specimens of M. arion were caught on Rum, but as she was not a lepidopterist, she could not

confirm their identity.12

There remained the question of the whereabouts of the specimens of lepidoptera collected by Professor Heslop Harrison in the Hebrides over the many years he worked there, including the types of a number of claimed Hebridean sub-species. This matter was pursued by E. C. Pelham-Clinton, who found that Professor Harrison's collection had been divided between Mr. T. C. Dunn and the Hancock Museum at Newcastle. Mr. Dunn most kindly allowed Pelham-Clinton to inspect his part of the Harrison collection, and provided valuable information on the latter's collecting methods. When Pelham-Clinton visited Mr. Dunn at Chester-le-Street and the Hancock Museum, he found to his great surprise that the collections referred to contained no specimens from the Hebrides. He wrote to J.L.C. that:

'Dunn was a friend of his (i.e. Heslop Harrison's), and went with him on some expeditions, though not to Rum or Canna. He can throw no light on arion. He said that Heslop Harrison got most of his records from larva beating: he beat wherever he went, 'identified' the larvae on the spot, and did not keep them. If any specimens had to be brought back for identification, they were not set, but compared with his collection and then thrown away. It is extraordinary that he did not even bother to set and add to his collection such species as Z. purpuralis the space for that species is empty. . . . I asked about the types of H.H.'s 'subspecies', such as Nyssia zonaria atlantica and Pararge aegeria oblita, but there are no types, no specimens at all. Dunn says that there were a lot of zonaria in store-boxes (I wonder who set them!) all devastated with Hofmannophila pseudospretella or such pests and that, with others, they were thrown away. He showed me some store-boxes that he thought would contain some Hebridean material, but there was none: one contained a number of arion, all from the Cotswolds or north Cornwall. . . . The collection is worthless as substantiation for any of H.H.'s records. . . . "13

<sup>&</sup>lt;sup>11</sup> Pelham-Clinton to J.L.C., 13/10/70.

<sup>&</sup>lt;sup>12</sup> Pelham-Clinton to Parsons, 19/7/72. <sup>13</sup> Pelham-Clinton to J.L.C., 24/11/69.

Pelham-Clinton considered that the most likely explanation of the Rum arion was that "H.H. misidentified some large and very blue female P. icarus, and when he discovered his mistake, had to send you (i.e. Parsons) an old arion to support his story".14

P. icarus is often large and brilliant in the Hebrides, and this kind of misidentification, I am sure, may very well lie behind one or two claims by amateur entomologists to have seen M. arion in other islands; but it cannot cover the alleged Rum specimens, for Professor Heslop Harrison knew var. caerulea of the P. icarus female well enough. 15

It must be said that it would have been an extraordinary thing for a professional zoologist connected with a wellestablished university to capture three specimens of such a rare butterfly as M. arion in a totally new and unexpected locality, and to have given two of them (one certainly unlabelled) away to amateur entomologists. An explanation of this might have been that Professor Heslop Harrison, having thought he saw M. arion flying on Rum in 1938, gave specimens from elsewhere to Parsons and Campion by which they might recognise the species if they visited the island. But this possibility is negatived by Parsons' recollection of his surprise at being given a supposed Rum specimen, and by the presence of Miss Rhodes at the time of the alleged captures.

The whole matter must be set against its circumstantial background. The first circumstance is that before its acquisition by the Nature Conservancy in 1957, the island of Rum was rigorously closed to the public by its owners; during the years of the war this closure was reinforced by the need of visitors to obtain military permits to enter any part of the Highland area west of the Caledonian Canal. Professor Heslop Harrison and his parties thus had a privileged access to the island.16 The second circumstance is that that M. arion is not the only unconfirmed butterfly reported by Professor Heslop Harrison from Rum; B. euphrosyne, E. aurinia, and E. aethiops, and on Canna C. tullia, all come into this category. Thirdly, one has to con-

<sup>14</sup> Pelham-Clinton to Parsons, 5/10/70.

<sup>&</sup>lt;sup>15</sup> See the *Entomologist* of January 1937, p. 3, where Professor Heslop Harrison described the finding of this form of the female *P. icarus* on Scalpay (Skye).

<sup>&</sup>lt;sup>16</sup> See the letter from (Sir) Frank Fraser Darling in *Sunday Times* of 25/1/48 pointing this out. So far as Canna was concerned, we made many landings on Rum between 1945 and 1955 in search of flotsam and we knew the wilder that the people on Proposition of the people of the peop Rum did themselves. The boulder beach of Harris in Rum, where arion is supposed to have occurred, is particularly difficult to land on. It was on such visits that various species of lepidoptera such as B. selene, C. matura and Z. purpuralis were observed on the western cliffs of Rum.

<sup>&</sup>lt;sup>17</sup> See the Transactions of the Society for British Entomology, Vol. 18, part 6, p. 115. It is unfortunate that in this list of the lepidoptera of Rum, euphrosyne (asserted from a single specimen seen on the wing, in the *Entomologist*, Vol. 71, p. 266), aurinia and aethiops, were not placed in square brackets as needing further confirmation.

sider John Raven's famous letter on "Alien Plant Introductions on the Isle of Rhum" in *Nature* of 15th January, 1949, which suggests that perhaps Professor Heslop Harrison's ardent and competitive personality may have laid him open to students' practical jokes.

One would like to think that the Large Blue, like the Chequered Skipper (C. palaemon), might really exist in suitable inaccessible spots in the West Highlands and Islands of Scotland. But before rumours of its presence can be accepted, fresh specimens must be produced by bona fide collectors, and competent entomologists must have the fullest opportunity to examine any alleged locality. So far as M. arion and the other species mentioned are concerned, this has been the case on the island of Rum since 1957, without any success.

## A Wet Season, 1974

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A local wood introduced my season on the evening of 22nd March, where I recorded ten species of Macros, including a dozen *Orthosia populeti* Fabricius, which seemed early, but judging from their damaged condition, had obviously been on

the wing some time.

Later in the month, I travelled down to the New Forest with Andrew Gardner, where we operated four mercury vapour lights and four actinics. The cloud cover gave way to cool and clear conditions and the only worth while moth taken was a female Lithophane ornitopus Hufn.¹ which must have already laid. We returned to Warwickshire the following morning and in the afternoon visited Oversley Wood, near Alcester, where in good sunshine Archiearis parthenias Linnaeus was abundant, flying around the birch tops and feeding high up on sallow blossom. Nymphalis io (Linnaeus), Polygonia c-album (Linnaeus) and Gonepteryx rhamni (Linnaeus) were also plentiful in all the rides and clearings.

That evening Brian Withers travelled up from Harpenden in the hope of *Trichopteryx polycommata* (Denis and Schiffermuller). We tried a local wood, where the moth traps produced four specimens, all in good condition.

At Oversley on 8th April, m.v. light attracted 25 O. populeti and a single Eupsilia transversa (Hufnagel). I was in the New Forest again on 11th April. The temperature remained at around 50°F. under the heavily overcast sky. Two m.v. lights and the two actinics produced 18 Odontosia carmelita (Esper), one Notodonta trepida (Esper), 15 Polyploca ridens (Fabricius), 2 O. populeti, 2 Xylena vetusta (Hübner), 2 Eupithecia irriguata (Hübner) and 21 other species of macro. Detailed searching of blackthorn bushes in the neighbourhood only produced one <sup>1</sup> Reports indicate that this species has become generally scarcer in recent years. — Editor.